

WHAT IS CLAIMED IS:

1                   1.     A method of producing composite vehicle door panels  
2     comprising:  
3                   manufacturing a skin in a vacuum-forming mold;  
4                   transferring the skin to a RIM mold;  
5                   applying natural fiber and an isocyanate and resin mixture onto the  
6     skin;  
7                   polymerizing the isocyanate and resin mixture, natural fiber, and a  
8     skin into a composite vehicle door panel.

1                   2.     The method of claim 1 wherein the natural fibers are hemp,  
2     kenaf, sisal, flax, or jute.

1                   3.     The method of claim 1 further comprising the step of  
2     trimming the skin before natural fibers are placed on the skin.

1                   4.     The method of claim 1 further comprising the step of  
2     trimming the skin after the isocyanate and resin mixture, natural fiber, and the skin  
3     have polymerized.

1                   5.     The method of claim 1 wherein the natural fibers are provided  
2     as rovings.

1                   6.     The method of claim 1 wherein the natural fibers are provided  
2     as a mat.

1                   7.     The method of claim 1 wherein the natural fibers and  
2     isocyanate and resin mixture are applied to the skin simultaneously.

1                   8.     The method of claim 1 wherein the natural fibers are applied  
2     to the skin first and the isocyanate and resin mixture are applied onto the natural  
3     fibers.